Amendments to the Claims:

This listing of claims will replace, without prejudice, all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for classifying occupants of a vehicle, comprising:

at least one sound-wave receiver for an occupant classification, situated in a seat of the vehicle; and

at least one sound-wave transmitter situated in the seat; and

a processor coupled to the sound-wave receiver and to the sound-wave transmitter, the processor configured to determine a relative deformation of the seat by calculating a propagation time of a sound-wave between transmission from the sound-wave transmitter and reception at the sound-wave receiver.

2. (Original) The system according to claim 1, wherein the at least one sound-wave transmitter and the at least one sound-wave receiver are reversible.

3. (Original) The system according to claim 1, wherein the at least one sound-wave transmitter and the at least one sound-wave receiver are piezoelectric.

4. (Canceled).

5. (Canceled).

6. (Original) The system according to claim 1, wherein the at least one sound-wave transmitter and the at least one sound-wave receiver are situated horizontally in the seat.

7. (Original) The system according to claim 1, wherein the at least one sound-wave transmitter and the at least one sound-wave receiver are situated vertically.

8. (Original) The system according to claim 1, wherein the at least one sound-wave transmitter is situated in a pressure-free manner.

9. (New) A system for classifying occupants of a vehicle, comprising:

at least one sound-wave receiver for an occupant classification, situated in a seat of the vehicle; and

at least one sound-wave transmitter situated in the seat; and

a processor coupled to the sound-wave receiver and to the sound-wave transmitter, the processor configured to determine a relative ageing of the sound-wave receiver by calculating at least one of a shift in frequency and a change in amplitude of a maximum signal.